

Attorney Docket No. AUS920030685US1
Serial No. 10/682,402
Response to Office Action mailed January 23, 2007

I. CLAIM AMENDMENTS

Please amend the claims as indicated in the following listing:

1. (currently amended) An apparatus comprising:

~~A firewall, having a processor and a memory, capable of creating a plurality of trust levels for a plurality of computer networks~~

wherein the firewall is part of a router that creates a plurality of Virtual Local Area Networks using a network switch;

wherein the network switch is connected to the firewall;

wherein the memory contains a Virtual Local Area Network rules table;

wherein the Virtual Local Area Network rules table allows an administrator to designate a trust level for each of the plurality of Virtual Local Area Networks;

wherein only the firewall is used to protect each of the plurality of Virtual Local Area Networks in accordance with a designated trust level.

2. (currently amended) The firewall of claim 1 comprising apparatus of claim 1 wherein the

Virtual Local Area Network rules table further comprises:

a plurality of rules; and

a table defining the relationship between the trust levels, the rules, and the computer networks plurality of Virtual Local Area Networks.

3. (currently amended) The firewall apparatus of claim 2, wherein the firewall further

comprises: a configuration program, wherein the configuration program allows a user to add, delete, or modify the Virtual Local Area Network rules table and a plurality of trust levels in the Virtual Local Area Network rules table.

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4. (currently amended) The firewall apparatus of claim 2, wherein the firewall further comprises: a security program, wherein the security program analyzes a packet and determines if the Virtual Local Area Network rules table permits or denies the packet.
5. (currently amended) The firewall apparatus of claim 4, wherein the security program comprises:
 - instructions for determining the a destination of the packet;
 - instructions for determining the an appropriate rule to use to analyze the packet using the Virtual Local Area Network rules table;
 - instructions for analyzing the packet using the rules appropriate rule;
 - instructions for determining if the packet is permitted under the rules appropriate rule;
 - responsive to a determination that the rules permit appropriate rule permits the packet,
 - instructions for permitting the packet; and
 - responsive to a determination that the rules deny the packet, instructions for denying the packet.
6. (currently amended) The firewall apparatus of claim 5, wherein the security program further comprises: responsive to a determination that the rules do not permit or deny the packet,
instructions for denying the packet.
7. canceled.
8. (currently amended) A router comprising:
 - a switch connected to a firewall and a plurality of computer networks; and

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wherein the firewall allows an administrator to creates configure a plurality of trust levels and to associates associate a trust level with each of the plurality of computer network networks;

wherein the firewall serves each of the plurality of computer networks in accordance with the trust level associated with each of the plurality of computer networks.

9. (original) The router of claim 8 wherein the switch comprises a sub-switch, the sub-switch being assigned one of a plurality of trust levels.
10. (original) The router of claim 8 wherein the firewall analyzes a packet using some of the rules; and wherein the rules used in the lower trust levels are excluded from the rules used to analyze the packet.
11. (original) The router of claim 8, wherein the firewall further comprises: a configuration program, wherein the configuration program allows a user to add, delete, or modify the rules and trust levels in the table.
12. (original) The router of claim 8, wherein the firewall further comprises: a security program, wherein the security program analyzes a packet and determines if the rules permit or deny the packet.
13. (original) The router of claim 12, wherein the security program comprises:
 - instructions for determining the sub-switch location of the packet;
 - instructions for determining a source of the packet;
 - instructions for determining a destination of the packet; and
 - instructions for determining if the packet is attempting to go to a higher trust level; responsive to a determination that the packet is not attempting to go to a higher trust level, instructions for permitting the packet.

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14. (original) The router of claim 13, wherein responsive to a determination that the packet is attempting to go to a higher trust level, the security program further comprises:
- instructions for determining the appropriate rules to use to analyze the packet using the table;
- instructions for analyzing the packet using the rules;
- instructions for determining if the packet is permitted under the rules;
- responsive to a determination that the rules permit the packet, instructions for permitting the packet; and
- responsive to a determination that the rules deny the packet, instructions for denying the packet.

15. (original) The router of claim 14, wherein the security program further comprises: responsive to a determination that the rules do not permit or deny the packet, instructions for denying the packet.

16. (original) The router of claim 8 wherein the firewall further comprises: a table defining the relationship between the trust levels, the rules, and the computer networks.

17. (currently amended) A method for analyzing a packet using a firewall which creates a plurality of trust levels for a plurality of computer networks, the method comprising:

using a single router containing the firewall to service each of the plurality of computer networks by performing the steps of:

determining the destination of the packet;

accessing a plurality of rules;

determining the appropriate rules to use to analyze the packet;

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analyzing the packet using the rules;
determining if the packet is permitted under the rules;
responsive to a determination that the rules permit the packet, permitting the packet;

and

responsive to a determination that the rules deny the packet, denying the packet.

18. (original) The method of claim 17 further comprising: responsive to a determination that the rules do not permit or deny the packet, denying the packet.

19. (original) The method of claim 17 wherein a table defines the relationship between the trust levels, the rules, and the computer networks.

20. (currently amended) A method for analyzing a packet using a firewall which creates a plurality of trust levels for a plurality of computer networks, the method comprising:

using a single router containing the firewall to service each of the plurality of computer networks by performing the steps of:

determining the sub-switch location of a packet;
determining a source of the packet;
determining a destination of the packet;
determining if the packet is attempting to go to a higher trust level; and
responsive to a determination that the packet is not attempting to go to a higher trust level, permitting the packet.

21. (original) The method of claim 20, wherein responsive to a determination that the packet is attempting to go to a higher trust level, the method further comprises:

determining the appropriate rules to use to analyze the packet using the table;

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analyzing the packet using the rules;
determining if the packet is permitted under the rules;
responsive to a determination that the rules permit the packet, permitting the packet;
and
responsive to a determination that the rules deny the packet, denying the packet.

22. (original) The method of claim 21 wherein the security program further comprises:
responsive to a determination that the rules do not permit or deny the packet, denying the packet.
23. (original) The method of claim 20 wherein the firewall further comprises: a table defining the relationship between the trust levels, the rules, and the computer networks.
24. (currently amended) A program product operable on a computer, the program product comprising:
a computer-readable medium having instructions encoded thereon, for causing a computer to use;
wherein the computer-readable medium comprises instructions comprising:
a single router containing a firewall to service each of a plurality of computer networks by
instructions for determining the destination of the a packet;
instructions for accessing a plurality of rules;
instructions for determining the an appropriate rule to use to analyze the packet;
instructions for analyzing the packet using the rulesappropriate rule;

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~~instructions for determining if the packet is permitted under the rules~~

appropriate rule;

~~responsive to a determination that the rules~~appropriate rule ~~permits~~ permits the packet, ~~instructions for permitting the packet; and~~

~~responsive to a determination that the rules~~appropriate rule ~~deny~~ denies the packet, ~~instructions for denying the packet.~~

25. (currently amended) The program product of claim 24 further comprising: responsive to a determination that the plurality of rules do not permit or deny the packet, instructions for denying the packet.

26. (currently amended) The program product of claim 24 wherein a table defines the relationship between the trust levels, the rules, and the plurality of computer networks.

27. (currently amended) A program product operable on a computer, the program product comprising:

a computer-readable medium having a plurality of instructions encoded thereon;

wherein the ~~computer readable medium~~ comprises instructions comprising:

cause a single router containing a firewall to secure each of a plurality of computer networks,
and cause an administrator to assign a plurality of trust levels among the plurality of
computer networks;

~~instructions for determining to determine~~ the sub-switch location of a packet;

~~instructions for determining to determine~~ a source of the packet;

~~instructions for determining to determine~~ a destination of the packet;

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~~instructions for determining to determine if the packet is attempting to go to a~~

higher trust level; and

responsive to a determination that the packet is not attempting to go to a

higher trust level, ~~instructions for permitting to permit the packet.~~

28. (original) The program product of claim 27, wherein responsive to a determination that the packet is attempting to go to a higher trust level, the method further comprises:

instructions for determining the appropriate rules to use to analyze the packet using the table;

instructions for analyzing the packet using the rules;

instructions for determining if the packet is permitted under the rules;

responsive to a determination that the rules permit the packet, instructions for permitting the packet; and

responsive to a determination that the rules deny the packet, instructions for denying the packet.

29. (original) The program product of claim 28 wherein the security program further comprises: responsive to a determination that the rules do not permit or deny the packet, instructions for denying the packet.

30. (original) The program product of claim 27 wherein the firewall further comprises: a table defining the relationship between the trust levels, the rules, and the computer networks.

31. (currently amended) A firewall capable of creating a plurality of trust levels for a plurality of computer networks comprising:

a router containing the firewall;

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a plurality of rules;

a table defining the relationship between the trust levels, the rules, and the computer networks;

a configuration program, wherein the configuration program allows a user to add, delete, or modify the rules and trust levels in the table;

a security program, wherein the security program analyzes a packet and determines if the rules permit or deny the packet, the security program comprising:

- instructions for determining the destination of the packet;
- instructions for determining the appropriate rules to use to analyze the packet using the table;
- instructions for analyzing the packet using the rules;
- instructions for determining if the packet is permitted under the rules;
- responsive to a determination that the rules permit the packet, instructions for permitting the packet;
- responsive to a determination that the rules deny the packet, instructions for denying the packet; and
- responsive to a determination that the rules do not permit or deny the packet, instructions for denying the packet;

wherein only the firewall is used to protect each of the plurality of computer networks.

32. canceled.